S&P GlobalMarket Intelligence

Rhode Island Economic Outlook Update

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Summary of employment growth to date in 2023

- Rhode Island's labor market started off 2023 on a positive note, adding 2,700 to nonfarm payrolls in the opening quarter. This reversed a contraction in fourth-quarter 2022 that had ended a streak of nine consecutive quarterly gains
 - 2.2% Q1 employment growth ranked 32nd nationally (trailing US pace of 2.7%) and 5th among the New England states
- Meanwhile, the state unemployment rate slipped 0.2 percentage point to 3.1% in first-quarter 2023, edging it back down towards the post-1990 low of 3% hit in 2022Q2.

Rho	de Island Employme	nt Growth by Sector, 2023Q1	
Sector	Change*	Sector	Change*
Construction	1.5	Finance and Insurance	0.0
Administrative Support Services	1.0	Transportation and Warehousing	0.0
Arts, Entertainment, Recreation	0.6	Management of Companies	-0.1
Retail Trade	0.4	Other Services	-0.1
Wholesale Trade	0.3	State and Local Government	-0.2
Federal Government	0.2	Utilities	-0.2
Education Services	0.2	Real Estate, Rental, and Leasing	-0.2
Professional, Scientific, Technical Svcs.	0.1	Healthcare	-0.4

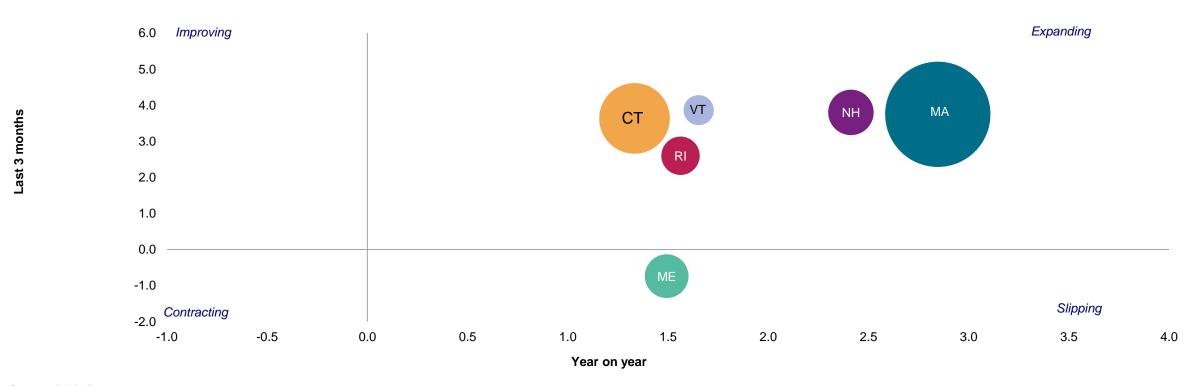
Data compiled April 2023.

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

*Level, Thousands

New England employment momentum: all but Maine in "expanding" territory

Employment momentum in March 2023, New England (% change, annual rate)



Data compiled April 2023.

Size of each data point represents state employment level for the most recent month. Source: Bureau of Labor Statistics, S&P Market Intelligence.



Tracking the recovery – RI labor market overall progress

- Between April 2020 and March 2023, Rhode Island nonfarm payrolls increased by 101,600
 - Accounts for ~94% of the total net loss observed between February and April 2020 (108,300 jobs)
- Unemployment rate down to 3.1% in March 2023 from a peak of 18%
 - Now comfortably below above pre-recession/pandemic level of ~3.6% (Jan/Feb 2020)
- Largest gains over the full recovery period concentrated in the sectors hardest-hit
- Construction, administrative support, and professional/scientific/technical, manufacturing surpass pre-pandemic levels

Changes in Monthly	Payroll Employ	yment (Level, ⁻	Thousands) – Apr-20 to Mar-23 vs Fo	eb-20 to Apr-20	
Sector	Apr20-Mar23	Feb20-Apr20	Sector	Apr20-Mar23	Feb20-Apr20
Accommodation and Food Services	29.0	-32.9	Transportation and Warehousing*	3.3	-3.9
Healthcare	13.9	-17.6	Wholesale Trade	3.0	-2.1
Retail Trade	10.5	-11.2	Real Estate, Rental, and Leasing	1.1	1 -1.4
Construction	7.7	-4.5	Information	3.0	-0.6
Other Services	6.8	-8.1	Finance and Insurance	0.5	-0.5
Manufacturing	6.5	-6.4	Utilities	0.2	0.0
Administrative Support Services	6.3	-6.2	Education Services	0.2	-2.4
Professional, Scientific, Technical Svcs.	6.0	-2.5	Management of Companies	-1.7	-0.6

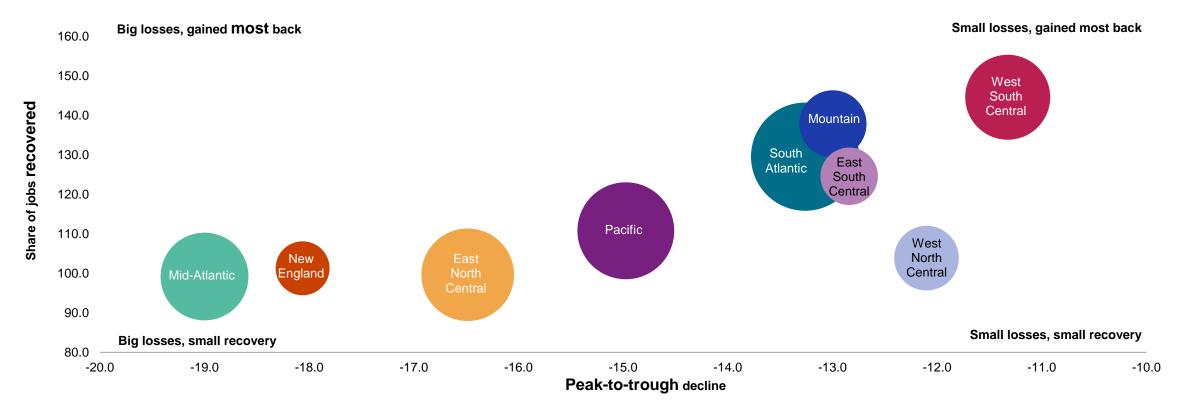
Data compiled April 2023.

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

*Losses occurred between Mar-20 and May-20

Midwest and Northeast regions close to returning to pre-pandemic peak employment, but lagging behind Southeast and West

Recovery of jobs lost, through March 2023 (percent change)



Data compiled April 2023.

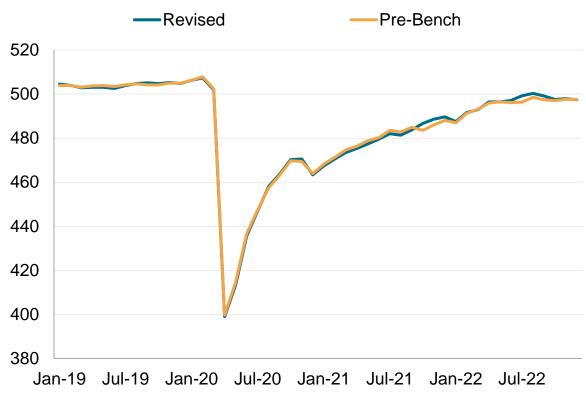
Source: Bureau of Labor Statistics, S&P Global Market Intelligence.



Benchmark: Overview of revised employment data at year-end 2022

- Nonfarm payrolls in Rhode Island for December 2022 were essentially unchanged relative to original estimates
 - 497.4 vs. 497.5 (in thousands)
- Revisions moved Dec-2022 year-over-year growth a bit more, though change still modest
 - 1.6% year-over-year revised gain vs. 1.9% in original estimates
- Overall, level changes tended to be small.
 - In the most recent 2-3 years of history, most months were revised by only a few tenths of a percentage point
- Unemployment rate revised down to 3.2% in December 2022 from 3.5% in original estimates

Rhode Island Total Nonfarm Employment (Thousands)



Data compiled Apr. 2023

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

More on the benchmark: A look across sectors

- Largest upward revision seen in retail trade
- Leisure and hospitality sector still facing a sizeable gap vs. pre-pandemic employment component subsectors had levels revised up a combined 2,100 positions
- Largest downward revisions seen in construction, management, and administrative support services
- State labor force count revised down 1.4% (-8,000) in December 2022, bringing year-over-year growth down from a 0.8% gain to a 0.4% decline.

Decen	December 2022 Payrolls By Sector - Revised vs. Original Estimate										
Sector	Change*	Sector	Change*								
Retail Trade	1.6	Professional, Scientific, Technical Services.	-0.2								
Arts, Entertainment, Recreation	1.4	Transportation and Warehousing	-0.3								
Real Estate, Rental, and Leasing	0.7	Healthcare	-0.5								
Accommodation and Food Services	0.7	Finance and Insurance	-0.7								
Utilities	0.5	Administrative Support Services	-0.8								
Wholesale Trade	0.3	Management of Companies	-1.1								
Information	0.1	Construction	-1.3								

Data compiled April 2023.

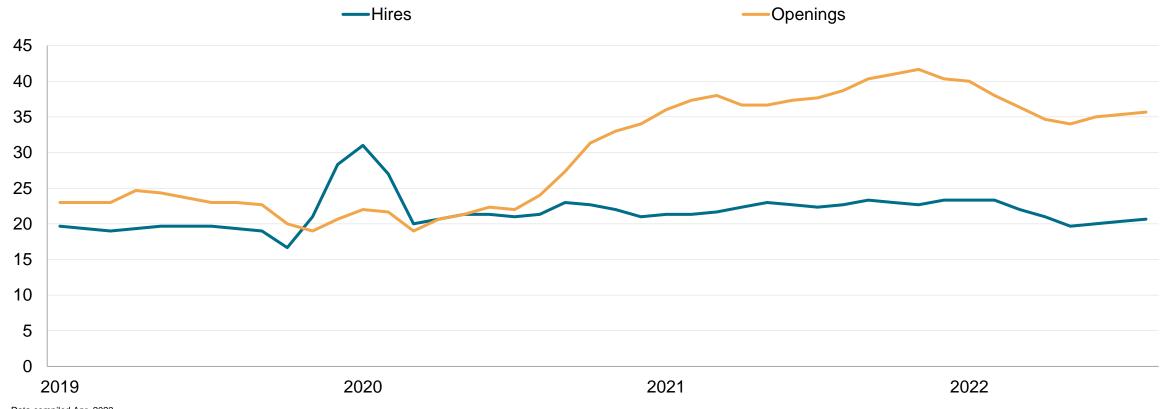
Source: S&P Global Market Intelligence, Bureau of Labor Statistics

*Level, Thousands

Another perspective on the Rhode Island labor market – JOLTS* data

Total Rhode Island monthly job openings and hires (data through Feb-23)

Thousands, seasonally adjusted three-month moving average



Data compiled Apr. 2023

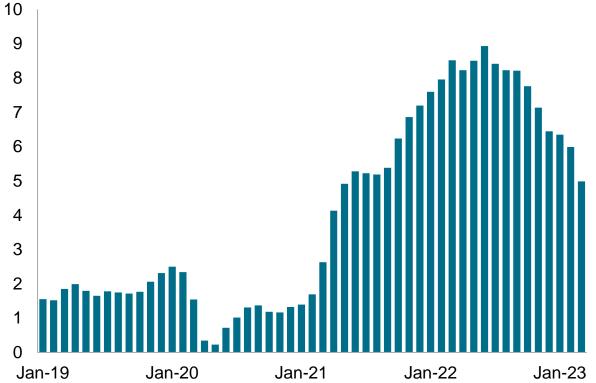
Source: S&P Global Market Intelligence, Bureau of Labor Statistics © 2023 S&P Global.

*Job Openings and Labor Turnover Survey

Regional differences in Consumer Price Index (CPI) inflation

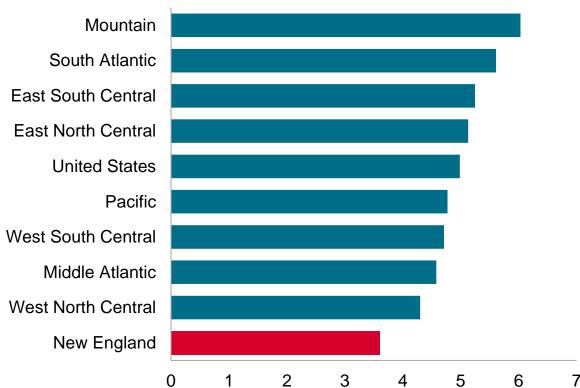
US Consumer Price Index - All Items

Percent Change Y/Y



Consumer Price Index By Region - All Items

Percent Change Y/Y - March 2023



Data compiled Apr. 2023.

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

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Data compiled Apr. 2023.
Source: S&P Global Marke

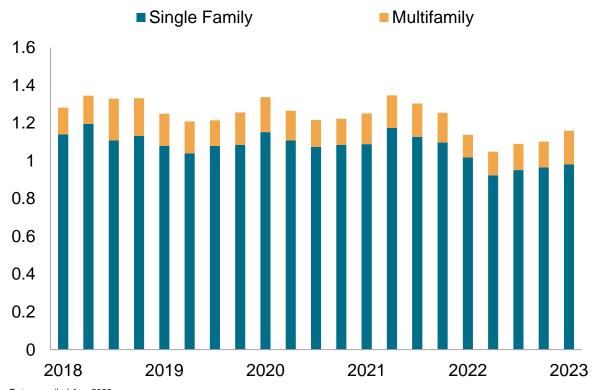
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Rhode Island residential real estate – home prices and housing starts

Rhode Island housing starts

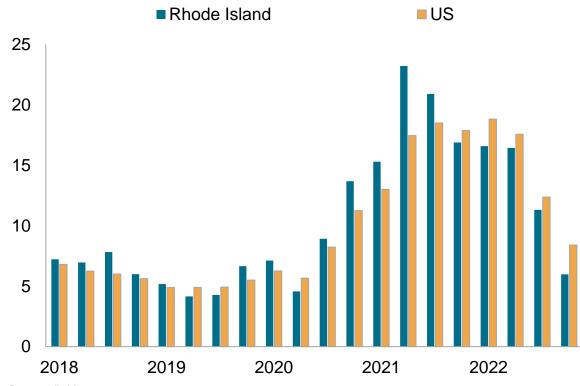
Thousands, four-quarter moving average



Data compiled Apr. 2023
Source: S&P Global Market Intelligence, Census Bureau
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FHFA purchase-only home price index

Percent change year-over-year



Data compiled Apr. 2023

Source: S&P Global Market Intelligence, Federal Housing Finance Agency © 2023 S&P Global.

Regional divergence in regional home prices during the second half of 2022

FHFA purchase-only index, percent change 2022q2 - 2022q4 (US = 0.4%)

Rank	State	%	Rank	State	%
1	Hawaii	5.5	37	Texas	0.5
2	South Carolina	3.6	38	Maryland	0.2
3	Arkansas	3.6	39	Minnesota	0.0
4	Delaware	3.2	40	Wyoming	0.0
5	Kentucky	2.9	41	Massachusetts	-0.2
6	Wisconsin	2.9	42	Colorado	-1.9
7	Oklahoma	2.8	43	Oregon	-1.9
8	Alabama	2.5	44	Rhode Island	-2.5
9	Nebraska	2.5	45	Washington	-2.8
10	lowa	2.4	46	Utah	-3.5
11	Virginia	2.3	47	California	-3.8
12	Vermont	2.2	48	Idaho	-4.1
13	Ohio	2.1	49	Arizona	-4.1
14	Pennsylvania	2.0	50	District of Columbia	-4.5
15	Indiana	1.9	51	Nevada	-4.6

Data compiled Apr. 2023

Source: S&P Global Market Intelligence, Federal Housing Finance Agency

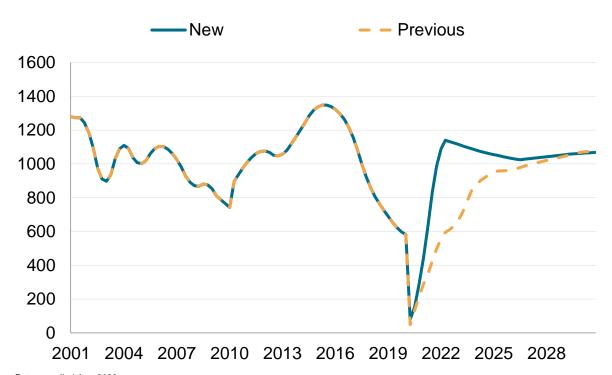


US Population: Immigration is back

Vintage 2022 population data shows resurgent net international migration

US Net Immigration

Annualized quarterly data, Thousands



Data compiled Apr. 2023

Note: 2011-19 are S&P Market Intelligence Estimates Based on Census 2020

Source: S&P Global Market Intelligence, Census Bureau

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State net international migration, thousands

	2016	2017	2018	2019	2020	2021	2022
CA	157	112	60	36	23	87	142
FL	182	167	114	78	35	90	139
NY	128	106	90	74	27	55	88
TX	111	82	64	57	26	84	130
MA	60	55	41	34	13	31	48
RI	6	6	6	3	1	2	3
Rest	632	513	414	359	149	370	570

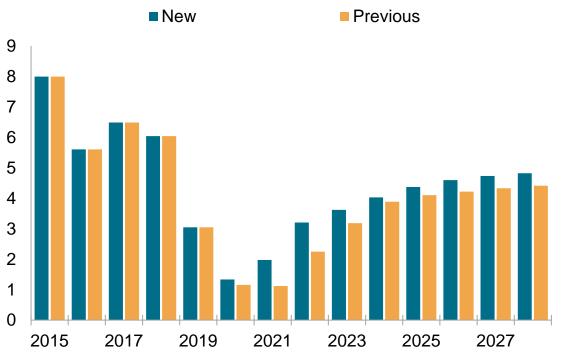
Data compiled April 2023.

Source: S&P Global Market Intelligence, Census Bureau

Rhode Island population: new population estimates show larger net domestic outflows that offset of higher international migration

Rhode Island net international migration

Thousands, annual total



Data compiled Apr. 2023

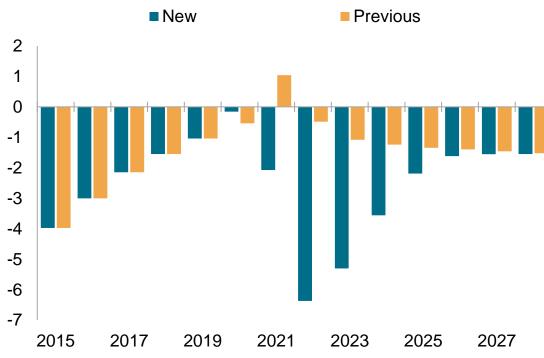
Note: 2011-19 are S&P Market Intelligence Estimates Based on Census 2020

Source: S&P Global Market Intelligence, Census Bureau

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Rhode Island net domestic migration

Thousands, annual total



Data compiled Apr. 2023

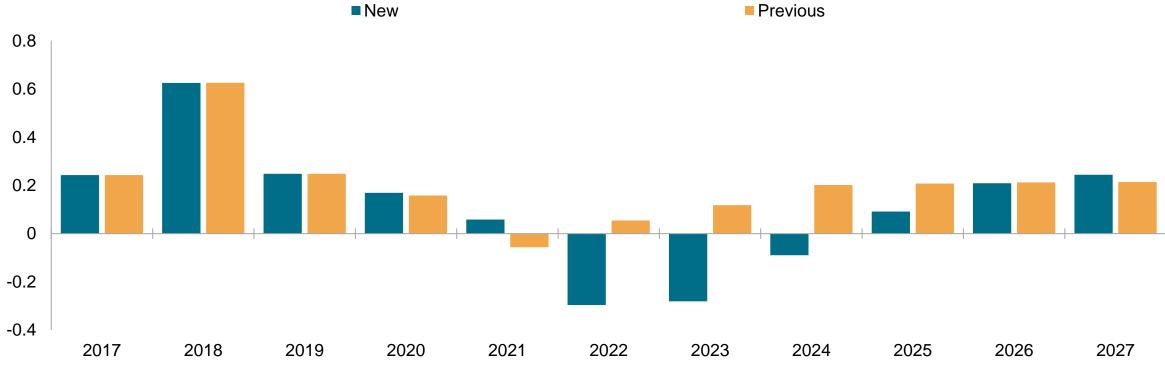
Note: 2011-19 are S&P Market Intelligence Estimates Based on Census 2020

Source: S&P Global Market Intelligence, Census Bureau

Revisions to migration counts in the population estimates have lowered our population forecast for Rhode Island

Rhode Island population growth

Percent change, July 1 to July 1



Data compiled Apr. 2023.

Note: 2011-19 are S&P Market Intelligence estimates based on Census 2020 Source: S&P Global Market Intelligence, Census Burreau

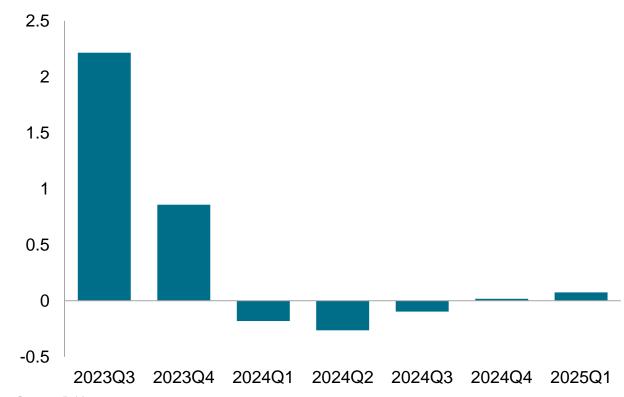


Rhode Island labor market: near term outlook over the next four quarters

- Employment growth will decelerate in the near term, with gains slowing to only 0.9% in the final quarter of FY2023
- Beyond that, we expect payrolls to decline slightly for FY2024q1 through FY2024q3
- Overall magnitude of the employment decline in the forecast quite small, amounting to only a fraction of a percentage point in total
 - Transition to below-trend growth rather than sharp contraction
 - Employment in Rhode Island will not be fully recovered from the 2020 downturn when the inflection point is reached
- · Employment by sector is mixed
 - Notable bounce back in healthcare, gains in S+L government
 - Notable contractions projected for retail trade, hospitality
- · Unemployment begins to rise, surpassing 4% threshold

Rhode Island total nonfarm employment growth (FY)

Quarterly percent change, annualized

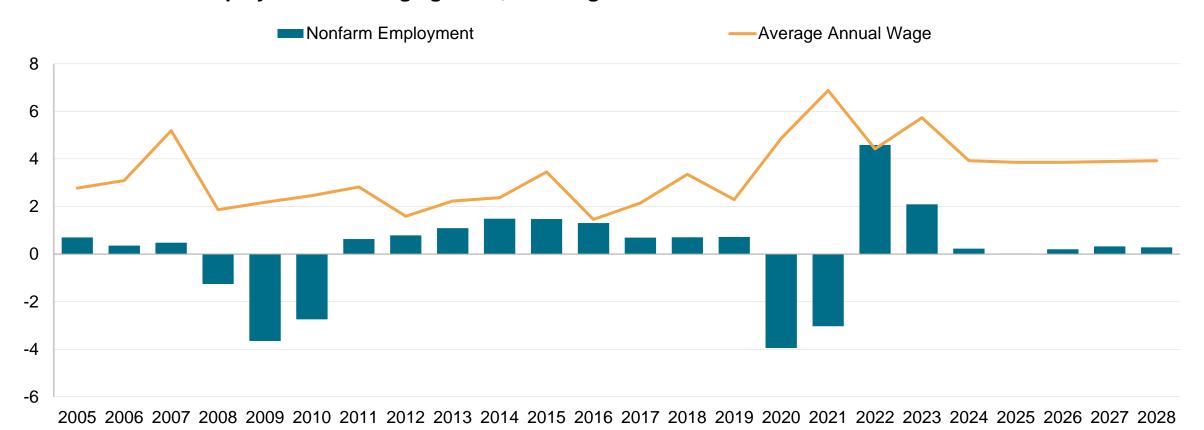


Data compiled Apr. 2023.

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

Wage growth will decelerate with employment, but remain elevated

Rhode Island FY employment and wage growth, % change



Data compiled Apr. 2023.

Source: S&P Global Market Intelligence, Bureau of Economic Analysis, Bureau of Labor Statistics © 2023 S&P Global.



Rhode Island key economic indicators, 2023-2026

April 2023 Forecast – Annual	Percent Cha	nge				
	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
Employment, Total Nonfarm	-3.0	4.6	2.1	0.2	0.0	0.2
Real GSP, (2012\$)	2.5	3.9	0.6	0.8	1.7	1.7
Total Personal Income (\$)	7.9	2.2	4.6	4.1	4.1	4.2
Wages and Salaries (\$)	4.1	9.2	7.9	4.1	3.8	4.0
Transfer Payments (\$)	19.5	-15.1	-0.9	4.6	5.4	5.2
Personal Consumption Exp.	5.5	11.6	7.3	3.6	3.2	3.6
Real PCE, (2012\$)	3.6	5.3	1.9	0.3	0.8	1.5
Unemployment Rate (%, Level)	7.5	4.0	3.2	3.8	4.4	4.5

Data compiled Apr. 2023

Source: S&P Global Market Intelligence

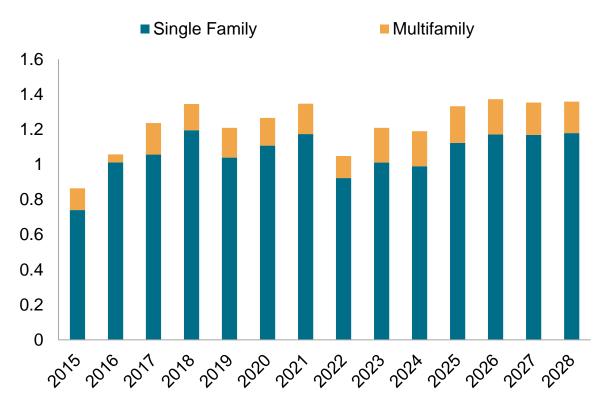
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Rhode Island residential real estate outlook

Rhode Island housing starts

Thousands, FY annual total



Data compiled Apr. 2023.

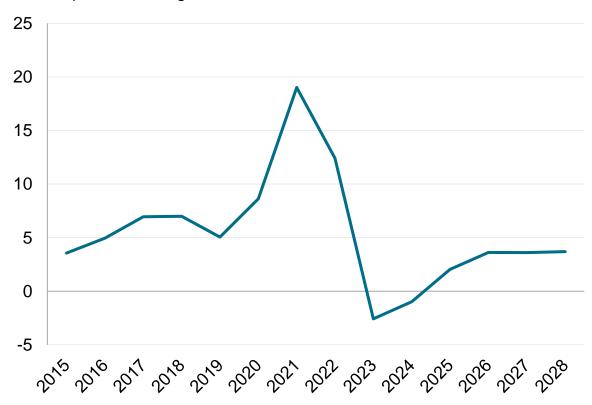
Source: S&P Global Market Intelligence, Census Bureau

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Median price of an existing single-family home

Annual percent change, FY



Data compiled Apr. 2023.

Source: S&P Global Market Intelligence, Federal Housing Finance Agency, Census Bureau

Forecast changes in selected concepts: 0423 vs. 1022

Nonfarm Employment (Level)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SPG October 2022	482.8	468.4	489.0	497.4	492.3	495.9	498.8	500.6	501.5
SPG April 2023	482.6	468.0	489.5	499.7	500.9	500.9	501.9	503.5	505.0
Change - Oct to April	-0.2	-0.4	0.4	2.3	8.5	5.0	3.1	3.0	3.5

Nonfarm Employment Growth	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SPG October 2022	-3.9	-3.0	4.4	1.7	-1.0	0.7	0.6	0.4	0.2
SPG April 2023	-3.9	-3.0	4.6	2.1	0.2	0.0	0.2	0.3	0.3
Change - Oct to April	0.0	0.0	0.2	0.4	1.3	-0.7	-0.4	0.0	0.1

Unemployment Rate (Level)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SPG October 2022	6.7	7.4	4.3	3.4	5.1	4.9	4.6	4.4	4.3
SPG April 2023	6.6	7.5	4.0	3.2	3.8	4.4	4.5	4.4	4.3
Change - Oct to April	-0.1	0.0	-0.3	-0.2	-1.3	-0.5	-0.1	0.0	0.0

Forecast changes in selected concepts: 0423 vs. 1022 (Continued)

Total Personal Income Growth	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SPG October 2022	6.9	7.9	1.9	3.4	3.9	4.7	4.6	4.3	4.2
SPG April 2023	6.9	7.9	2.2	4.6	4.1	4.1	4.2	4.3	4.4
Change – Oct to April	0.0	0.0	0.3	1.2	0.2	-0.5	-0.4	0.0	0.1

Wage/Salary Disbursement Growth	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SPG October 2022	0.4	4.1	8.7	5.3	3.1	5.2	4.9	4.4	4.0
SPG April 2023	0.4	4.1	9.2	7.9	4.1	3.8	4.0	4.2	4.2
Change - Oct to April	0.0	0.0	0.6	2.6	1.0	-1.4	-0.9	-0.2	0.2

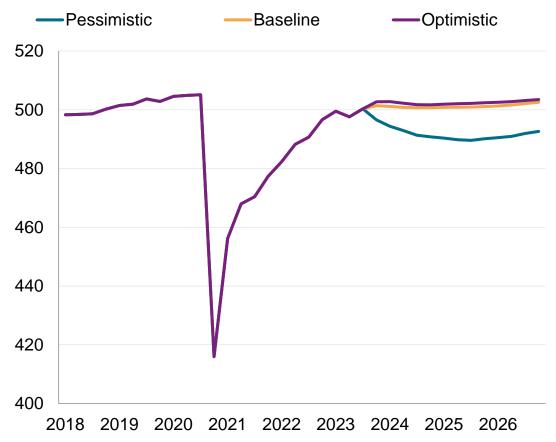
Personal Consumption Expenditure Growth	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
SPG October 2022	-1.6	5.6	11.4	5.6	2.8	3.7	4.0	3.8	3.8
SPG April 2023	-1.5	5.5	11.6	7.3	3.6	3.2	3.6	4.0	4.1
Change - Oct to April	0.1	-0.1	0.2	1.7	0.8	-0.5	-0.5	0.2	0.3

Risks to the US forecast

	Baseline (55%)	Pessimistic (25%)	Optimistic (20%)
GDP Growth	Real GDP rises 1.4% in 2023 as the aggressive recovery following the pandemic-induced downturn begins to chill. Growth then edges up to 1.5% in 2024 and 1.9% in 2025.	Real GDP rises 1.0% in 2023 in response to sustained weakness through the end of 2022 leading into 2023. Growth then falls to 0.8% in 2024 before rising to 1.7% in 2025.	Real GDP grows 1.9% in 2023 as the relative strength in consumer spending supports growth. Growth persists at 1.7% in 2024 and 2.0% in 2025.
Consumer spending	Consumption drops from 2.7% in 2022 to 1.9% in 2023. Growth continues at 1.2% in 2024 and 1.8% in 2025.	Spending rises 1.5% in 2023, 0.7% in 2024, and 1.6% in 2025.	Spending rises 2.3% in 2023, 1.3% in 2024, and 1.9% in 2025.
Housing	Housing starts shrink from 1.55 million in 2022 to 1.29 million in 2023 before turning upward to 1.32 million in 2024 and to 1.41 million in 2025.	Housing starts drop from 1.55 million in 2022 to 1.24 million in 2023 and 1.20 in 2024, before rising to 1.30 million in 2025.	Housing starts fall from 1.56 million in 2022 to 1.31 million in 2023. Housing starts then pick up to 1.35 million in 2024 and 1.44 million in 2025.
Inflation	Core personal consumption (PCE) price inflation falls from 5.0% in 2022 to a more moderate 4.2% in 2023, 3.0% in 2024, and 2.2% in 2025.	Core PCE price inflation slows to 4.4% in 2023, 2.9% in 2024, and 1.7% in 2025.	Core PCE price inflation falls from 5.0% in 2022 to 4.1% in 2023, 3.2% in 2024, and 2.3% in 2025.
Business fixed investment	Increases 1.8% in 2023 before easing to 1.2% in 2024 and 1.4% in 2025.	Rises 0.5% in 2023 before falling by 2.4% in 2024 and 1.9% in 2025.	Rises 2.6% in 2023, 1.8% in 2024, and 2.3% in 2025

Rhode Island alternative scenarios: employment and unemployment

Rhode Island nonfarm employment (FY) - Thousands



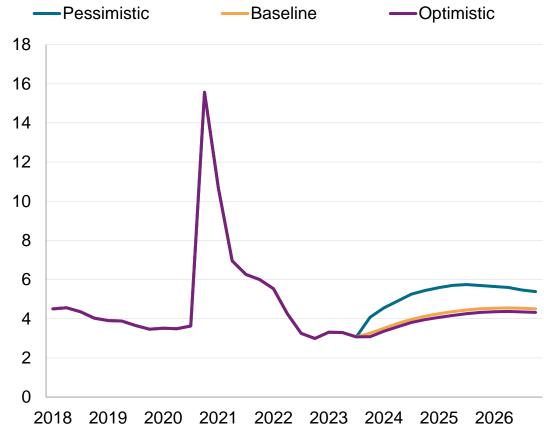
Data compiled Apr. 2023.

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

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Rhode Island unemployment rate (FY) - Percent



Data compiled Apr. 2023.

Source: S&P Global Market Intelligence, Bureau of Labor Statistics

Thank you

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